

REMARKS

Claims 1-5, 7-9, and 11-19 are currently pending in the application. Claims 1-5, 7-9, and 11-18 have been amended. Claims 6 and 10 have been canceled. New claim 19 has been added. Applicant respectfully submits that no new matter has been added. Applicant respectfully requests reconsideration of the application in view of the foregoing amendments and the following remarks.

Claims 1, 10, 13-14, and 17-18 have been objected to due to various informalities. Claim 10 has been canceled, thus rendering the rejection thereof moot. Claims 1, 13-14, and 17-18 have been amended to overcome the Examiner's objections. The specification stands objected to for various informalities. In response, Applicant has canceled claim 10 and amended claims 15-16 to overcome the specification objections.

Claims 6 and 8 stand rejected under 35 U.S.C. § 112 for insufficient antecedent basis. Claim 6 has been canceled, thus rendering the rejection thereof moot. Claim 8 has been amended to overcome the § 112 rejection.

Claim 1 stands rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 3,974,862 to Fuhrmann ("Fuhrmann"). Independent claim 1 relates to an anti-buckling device for insertion into a thin-walled fluid duct. Applicant respectfully submits that Fuhrmann fails to teach, suggest, or anticipate at least one of the distinguishing features of independent claim 1, namely, wherein a cross-section of the anti-buckling device fills a cross-section of the duct in such a way that duct walls lie on a plurality of ribs at a buckling point but cannot penetrate into the grooves causing grooves to remain open and permeable for fluids when the anti-buckling device is bent.

Fuhrmann discloses a flexible conduit assembly for conduction of fluids. Fuhrmann further discloses a tube system with an outer corrugated tube and an inner flexible tube wherein the space between the tubes is available for the conduction of fluid. In contrast to claim 1, Fuhrmann fails to disclose bending of a conduit thereby causing restrictions or interruptions for the fluid conveyed. The conduit as shown in Fuhrmann is of a common kind having a flexible inner tubing and an outer protection tube that is corrugated helically or annularly in order to remain flexible. In contrast to claim 1, it appears to us that the tubing as disclosed in Fuhrmann

is of a kind that does not require an anti-buckling device for insertion into a thin-walled fluid duct causing grooves to remain open and permeable for fluids when the anti-buckling device is bent as claimed. Applicant respectfully submits that independent claim 1 distinguishes over Fuhrmann. Withdrawal of the rejection of independent claim 1 is respectfully requested.

Claims 1-2 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,163,474 to MacDonald et al. ("MacDonald"). Independent claim 1 relates to an anti-buckling device for insertion into a thin-walled fluid duct. Applicant respectfully submits that MacDonald fails to teach, suggest, or anticipate at least one of the distinguishing features of independent claim 1, namely, wherein a cross-section of the anti-buckling device fills a cross-section of the duct in such a way that duct walls lie on a plurality of ribs at a buckling point but cannot penetrate into the grooves causing grooves to remain open and permeable for fluids when the anti-buckling device is bent.

MacDonald discloses a non flexible conduit assembly including internal fins adapted to wipe away a boundary layer and thereby enhance effective heat transfer between the fins and the fluid. In contrast to claim 1, MacDonald fails to disclose bending of a conduit thereby causing restrictions or interruptions for the fluid conveyed. MacDonald fails to disclose that the fins can serve as spacer elements at a buckling point if the tubing was made of flexible material and bended. In contrast to claim 1, the conduit as disclosed in MacDonald is made of metal preventing the conduit to bend as claimed. Applicant respectfully submits that independent claim 1 distinguishes over MacDonald. Withdrawal of the rejection of independent claim 1 is respectfully requested.

Dependent claim 2 depends from and further restricts independent claim 1 in a patentable sense. Applicant respectfully submits that, for at least the reasons set forth above with respect to the rejection of independent claim 1, dependent claim 2 distinguishes over MacDonald and is in condition for allowance. Withdrawal of the rejection of dependent claim 2 is respectfully requested.

Claim 1 stands rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,803,127 to Rains ("Rains"). Applicant respectfully submits that Rains fails to teach, suggest, or anticipate at least one of the distinguishing features of independent claim 1, namely,

wherein a cross-section of the anti-buckling device fills a cross-section of the duct in such a way that duct walls lie on a plurality of ribs at a buckling point but cannot penetrate into the grooves causing grooves to remain open and permeable for fluids when the anti-buckling device is bent.

Rains discloses a coaxial piping system for the transport of toxic and hazardous gases. Rains further discloses a non-flexible conduit assembly. Rains teaches a bent in the coaxial piping system. Rains fails to disclose bending of the conduit assembly thereby causing interruptions for the fluid. In contrast to claim 1, Rains discloses, spacers to allow purging gas to circulate but fails to disclose a buckling point as claimed. In Rains, there is no indication of a buckling point when bent. Since Rains fails to disclose a buckling point, Rains is silent with respect to the prevention of the same. Applicant respectfully submits that independent claim 1 distinguishes over Rains. Withdrawal of the rejection of independent claim 1 is respectfully requested.

Claims 1-3, 6, 8, 10-11, and 13 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,420,016 to Nichols (“Nichols”). Claims 6 and 10 have been canceled, thus rendering the rejections thereof moot.

Independent claim 1 relates to an anti-buckling device for insertion into a thin-walled fluid duct. Applicant respectfully submits that Nichols fails to teach, suggest, or anticipate at least one of the distinguishing features of independent claim 1, namely, wherein a cross-section of the anti-buckling device fills a cross-section of the duct in such a way that duct walls lie on a plurality of ribs at a buckling point but cannot penetrate into the grooves causing grooves to remain open and permeable for fluids when the anti-buckling device is bent.

Nichols discloses a spine for flexible aquarium air hoses including a plurality of rib members, each having at least three radially disposed ribs. Each adjacent pair of rib members are connected at the centre by a substantially flexible connecting member. A spine is inserted inside the flexible hose at areas where the hose is to be bent, thereby preventing kinking of the hose. In contrast to claim 1, Nichols fails to disclose wherein a cross-section of the anti-buckling device fills a cross-section of the duct in such a way that duct walls lie on a plurality of ribs at a buckling point. Applicant respectfully submits that independent claim 1 distinguishes over Nichols. Withdrawal of the rejection of independent claim 1 is respectfully requested.

Dependent claims 2-3, 8, 11, and 13 depend from and further restrict independent claim 1 in a patentable sense. Applicant respectfully submits that, for at least the reasons set forth above with respect to the rejection of independent claim 1, dependent claims 2-3, 8, 11, and 13 distinguishes over Nichols and are in condition for allowance. Withdrawal of the rejection of dependent claims 2-3, 8, 11, and 13 is respectfully requested.

Claims 1, 4-6, 8, 11, and 13-14 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,604,549 to Gauthier et al. ("Gauthier").

Independent claim 1 relates to an anti-buckling device for insertion into a thin-walled fluid duct. Applicant respectfully submits that Gauthier fails to teach, suggest, or anticipate at least one of the distinguishing features of independent claim 1, namely, wherein a cross-section of the anti-buckling device fills a cross-section of the duct in such a way that duct walls lie on a plurality of ribs at a buckling point but cannot penetrate into the grooves causing grooves to remain open and permeable for fluids when the anti-buckling device is bent. Gauthier discloses a device for fixing a tubular element in a cavity, such as a tube. The tube may be bent, but there is no information about a possible buckling point causing restrictions for the transported fluid as claimed. Applicant respectfully submits that independent claim 1 distinguishes over Gauthier. Withdrawal of the rejection of independent claim 1 is respectfully requested.

Dependent claim 6 has been canceled, thus rendering the rejection thereof moot. Dependent claims 4-5, 8, 11, and 13-14 depend from and further restrict independent claim 1 in a patentable sense. Applicant respectfully submits that, for at least the reasons set forth above with respect to the rejection of independent claim 1, dependent claims 4-5, 8, 11, and 13-14 distinguish over Gauthier and are in condition for allowance. Withdrawal of the rejection of dependent claims 4-5, 8, 11, and 13-14 is respectfully requested.

Claims 1, 6, 8, 11-13, and 15-17 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 3,720,235 to Schrock ("Schrock"). Independent claim 1 relates to an anti-buckling device for insertion into a thin-walled fluid duct. Applicant respectfully submits that Schrock fails to teach, suggest, or anticipate at least one of the distinguishing features of independent claim 1, namely, wherein a cross-section of the anti-buckling device fills a cross-section of the duct in such a way that duct walls lie on a plurality of ribs at a buckling

point but cannot penetrate into the grooves causing grooves to remain open and permeable for fluids when the anti-buckling device is bent.

Schrock discloses a tube having internal longitudinal ribs. The tube is adapted to convey fluids under pressure and to be distorted without kinking and blocking of fluid flow therethrough. The tube as disclosed in Schrock is a composite tube reinforced by fibrous reinforcing material wound about the tube. Schrock discloses a composite tube and not an anti-buckling device for insertion into a thin-walled fluid duct as claimed. In addition, Schrock fails to disclose wherein an envelope of the anti-buckling device in at least a portion of a length of the anti-buckling device corresponds to the cross-section of the duct at the buckling point as claimed. Applicant respectfully submits that independent claim 1 distinguishes over Schrock. Withdrawal of the rejection of independent claim 1 is respectfully requested.

Dependent claim 6 has been canceled, thus rendering the rejection thereof moot. Dependent claims 8, 11-13, and 15-17 depend from and further restrict independent claim 1 in a patentable sense. Applicant respectfully submits that, for at least the reasons set forth above with respect to the rejection of independent claim 1, dependent claims 8, 11-13, and 15-17 distinguish over Schrock and are in condition for allowance. Withdrawal of the rejection of dependent claims 8, 11-13, and 15-17 is respectfully requested.

Claims 7, 9, and 15-16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Nichols. Dependent claims 7, 9, and 15-16 depend from and further restrict independent claim 1 in a patentable sense. Applicant respectfully submits that, for at least the reasons set forth above with respect to the rejection of independent claim 1, dependent claims 7, 9, and 15-16 distinguish over Nichols and are in condition for allowance. Withdrawal of the rejection of dependent claims 7, 9, and 15-16 is respectfully requested.

Claim 12 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Gauthier in view of U.S. Patent No. 4,452,279 to Atwell ("Atwell"). Dependent claim 12 depends from and further restricts independent claim 1 in a patentable sense. Applicant respectfully submits that, for at least the reasons set forth above with respect to the rejection of independent claim 1, dependent claim 12 distinguishes over Gauthier and Atwell and is in

condition for allowance. Withdrawal of the rejection of dependent claim 12 is respectfully requested.

Claims 2-3 and 18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Schrock in view of U.S. Patent No. 3,294,122 to Sharp ("Sharp"). Dependent claims 2-3 and 12 depend from and further restrict independent claim 1 in a patentable sense. Applicant respectfully submits that, for at least the reasons set forth above with respect to the rejection of independent claim 1, dependent claims 2-3 and 18 distinguish over Schrock and Sharp and are in condition for allowance. Withdrawal of the rejection of dependent claims 2-3 and 18 is respectfully requested.

New claim 19 depends from and further restricts independent claim 1 in a patentable sense. Applicant respectfully submits that, for at least the reasons set forth above with respect to the rejection of independent claim 1, dependent claim 19 distinguishes over the cited references and is in condition for allowance.

In view of the above amendment, Applicant respectfully submits that the present application is in condition for allowance. A Notice to that effect is respectfully requested.

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Respectfully submitted,

By 

Shoaib A. Mithani

Registration No.: L0067

WINSTEAD PC

P. O. Box 50784

Dallas, Texas 75201

(214) 745-5403

Attorneys For Applicant